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Trauma appraisals, emotion regulation difficulties, and self-compassion predict posttraumatic stress symptoms following childhood abuse

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ABSTRACT

Experiencing traumatic events and abuse is unfortunately common in general, non-clinical samples. Recent research indicates that the ways in which individuals interpret traumatic experiences, as well as the ways that they manage challenging emotions in general, may statistically predict post-traumatic stress disorder (PTSD) symptoms to a greater extent than does trauma itself. Negative trauma appraisals, generalized emotion regulation (ER) difficulties, and low levels of self-compassion have each been shown to influence the connection between trauma exposure and subsequent PTSD symptoms. However, little is known regarding how these processes interact, or their relative contributions to mental health after trauma. The current study analyzed data from 466 university students who completed self-report measures of childhood abuse, PTSD symptoms, trauma appraisals, ER difficulties, and self-compassion. Childhood abuse exposure and PTSD symptoms were positively associated with negative trauma appraisals and ER difficulties, and negatively associated with self-compassion. Self-compassion was inversely associated with negative trauma appraisals and ER difficulties. Multiple mediation analyses demonstrated that negative trauma appraisals, ER difficulties, and levels of self-compassion fully explained the link between abuse exposure and PTSD symptoms via several specific pathways. These findings suggest that researchers, clinicians, and abuse survivors can benefit from addressing these interconnected domains during treatment and recovery processes.

Recent research indicates that the ways in which individuals interpret traumatic experiences, as well as the ways that they manage challenging emotions in general, may predict post-traumatic stress disorder (PTSD) symptoms to a greater extent than does the trauma itself. *Trauma appraisals,* such as shame and self-blame, appear to contribute to PTSD symptoms over and above the impact of trauma exposure (Cromer & Smyth, 2010; DePrince, Chu, & Pineda, 2011). Generalized difficulties with *emotion regulation* (ER), or people's efforts and successes in managing distress, also influence the development and maintenance of PTSD symptoms after trauma (e.g., Badour & Feldner, 2013; Powers, Cross, Fani, & Bradley, 2015). In addition, *self-compassion*, or the tendency to meet one's own internal struggles with kindness rather than criticism, seems to mitigate PTSD symptoms and to facilitate trauma recovery (Játiva & Cerezo, 2014; Zeller, Yuval, Nitzan-Assayag, & Bernstein, 2015). Despite recent advances showing that these internal cognitive and emotional processes are strongly linked with PTSD

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symptoms and recovery, there exists scant evidence examining interrelationships among these domains or evaluating their relative contributions to PTSD symptoms.

Childhood abuse is prevalent, with estimates of child sexual abuse hovering around 22% prevalence in women and 9–10% in men (e.g., Bolen & Scannapieco, 1999; Hebert, Tourigny, Cyr, McDuff, & Joly, 2009). The vast majority of child sexual abuse is not disclosed to anyone while it is happening, if ever, and is rarely investigated by any protective agencies (Fontes & Plummer, 2010; Hebert et al., 2009). Childhood abuse of all kinds is even more prevalent, and is strongly associated with a range of physical and mental health difficulties; it is also strongly linked with negative trauma appraisals, ER difficulties, lower levels of self-compassion, and more PTSD symptoms (Choi, Choi, Gim, Park, & Park, 2014; Sundermann & DePrince, 2015).

Childhood abuse may contribute to maladaptive cognitive and emotional tendencies through several pathways, including the common responses of internalizing abuse as deserved (Briere, 1992) and of forming insecure attachments to parents or caregivers, a feature linked with deficits in emotional coping skills (Alink, Cicchetti, Kim, & Rogosch, 2009). In addition, both negative trauma appraisals (such as shame) and ER difficulties appear to contribute to the perpetration of violence (Hundt & Holohan, 2012). On the bright side, interventions that decrease negative trauma appraisals, cultivate healthy ER skills, or promote self-compassion demonstrate meaningful reductions in PTSD symptoms and other forms of distress (e.g., Kearney et al., 2013; Schumm, Dickstein, Walter, Owens, & Chard, 2015). However, these domains have most commonly been measured separately, both as predictors of mental health problems and as roads to recovery. A richer understanding of the interrelationships between the internal factors that maintain distress in abuse survivors – and that may enhance abuse recovery – may advance intervention and treatment efforts.

1. Negative trauma appraisals

Negative trauma appraisals are strongly linked with PTSD symptoms (Cromer & Smyth, 2010; DePrince et al., 2011). Trauma appraisals such as self-blame or shame can exacerbate and maintain PTSD symptoms (e.g., Uji, Shikai, Shono, & Kitamura, 2007). In fact, negative trauma appraisals predict symptoms of PTSD and depression *over and above* the extent of trauma exposure that individuals experience (Andrews, Brewin, Rose, & Kirk, 2000). Research demonstrates that appraisals about trauma both at the time of trauma and later in life are associated with a range of symptoms including PTSD, depression, and general distress (DePrince, Zurbriggen, Chu, & Smart, 2010).

Encouragingly, trauma survivors can change their trauma appraisals and decrease related PTSD symptoms (Price, MacDonald, Adair, Koerner, & Monson, 2016). For instance, Schumm et al. (2015) analyzed data from 195 veterans with PTSD and tracked trauma-related thoughts and PTSD symptoms over time as the veterans participated in a therapy program. Changes in trauma-related thoughts such as self-blame and negative beliefs about oneself preceded decreases in veterans' levels of PTSD and depression (Schumm et al., 2015). Similarly, McLean, Yeh, Rosenfield, and Foa (2015) demonstrated that changes in negative trauma-related cognitions led to reductions in PTSD and depression among 61 assault victims. These treatment studies complement other research evidence demonstrating that trauma appraisals may mediate the link between trauma exposure and PTSD (e.g., Meiser-Stedman, Dalgleish, Glucksman, Yule, & Smith, 2009).

Negative trauma appraisals have been shown to impact PTSD symptoms among diverse samples, including military veterans (Schumm et al., 2015) and survivors of interpersonal violence (Beck et al., 2011). Childhood abuse may be especially likely to produce negative trauma appraisals, because it occurs concurrently with developmental processes related to cognitions about the self; because the abuse itself may include and inculcate appraisals such as self-blame; and because negative appraisals may arise as a way to resolve the cognitive dissonance that arises when being hurt by a caregiver (Briere, 1992). Examples of common negative appraisals include ideas like "I deserve what happened to me" and "I'm a bad person." Survivors of childhood physical, sexual, and emotional abuse can have lingering shame, self-blame, mistrust, hostility, sense of inadequacy, and alienation throughout adulthood (Choi et al., 2014; Salmon et al., 2006). The experience of childhood abuse and/or subsequent negative trauma appraisals also appears to influence individuals' responses to trauma in adulthood. For instance, a history of childhood abuse increased the likelihood of self-blame following intimate partner abuse among a sample of 230 adult women (Babcock & DePrince, 2012). These and other studies indicate that negative trauma appraisals may comprise an important mechanism in the onset, maintenance, and reduction of PTSD symptoms among both trauma survivors in general and among childhood abuse survivors in particular.

2. Emotion regulation

Emotion regulation (ER) refers to the ways in which individuals influence, manage, experience, and express their responses to internal or external events (Gross, 1998). ER strategies may include methods shown to be beneficial, including cognitive reappraisal (Andreotti et al., 2013), as well as strategies that may reflect attempts to regulate emotions but that have serious drawbacks, such as self-criticism (Dunkley, Sanislow, Grilo, & McGlashan, 2009). Researchers have also used self-report measures to gauge individuals' own perceptions of difficulties with ER, such as feeling overwhelmed or unable to manage emotions. Self-reports of ER difficulties are strongly linked to a range of mental health symptoms. Whereas healthy, flexible ER capacities may serve as a key factor underlying well-being, ER difficulties appear to comprise a transdiagnostic risk factor for many mental health problems (e.g., Finlay-Jones, Rees, & Kane, 2015; Gross & Muñoz, 1995; Tull, Barrett, McMillan, & Roemer, 2007).